The following pages provide information on 34 additional small business computer systems from 17 vendors. Listed below are the full names, addresses, and telephone numbers of the 17 vendors whose systems are listed in the comparison columns that follow.

**BMC Computer Corporation,** 860 E. Walnut Avenue, Carson, CA 90746. Telephone (213) 323-2600.

**Burroughs Corporation**, Burroughs Place, Detroit, MI 48232. Telephone (313) 972-7000.

**CIE Systems, Inc.,** 2515 McCade Way, P.O. Box 16579, Irvine, CA 92713-6579. Telephone (714) 957-1112.

Computhink, 965 West Maude Avenue, Sunnyvale, CA 94086. Telephone (408) 245-4033.

Hewlett-Packard, Computer Systems Division, 19447 Pruneridge Avenue, Cupertino, CA 95014. Telephone (408) 725-8111.

**IBM**, Information Systems Division, 4111 Northside Parkway, Atlanta, GA 30327. Telephone (404) 238-2000.

MAI/Basic Four, Information Systems Division, 14101 Myford Road, Tustin, CA 92680. Telephone (714) 731-5100.

Muliti-Tech Systems, Inc., 82 Second Avenue S.E., New Brighton, MN 55112. Telephone (612) 631-3550.

Northern Telecom, Inc., Data Park, P.O. Box 1222, Minneapolis, MN 55440. Telephone (612) 932-8016.

Plessey Peripheral Systems, 17466 Daimler Avenue, Irvine, CA 92714. Telephone (714) 557-9811.

Radio Shack, a Tandy Corporation, 1800 One Tandy Center, Fort Worth, TX 76102. Telephone (817) 390-3300.

**R2E of America, 2545** West County Road C, St. Paul, MN 55113. Telephone (612) 638-5900.

**SD Systems, Inc.,** P.O. Box 28810, Dallas, TX 75228. Telephone (214) 340-0303.

Systems Group, a division of Measurement Systems & Controls, Inc., 1601 Orangewood Avenue, Orange, CA 92668. Telephone (714) 633-4460.

**Tarbell Electronics**, 950 Dovlen Place, Suite B, Carson, CA 90746. Telephone (213) 538-4251.

Zendex Corporation, 6680 Sierra Lane, Dublin, CA 94566. Telephone (415) 829-1284.

**Zilog, Inc.**, 10460 Bubb Road, Cupertino, CA 95014. Telephone (408) 446-4666.□

MANUFACTURER AND MODEL	BMC if800 Model 20B	BMC if800 Model 20C	BMC if800 Model 20E	Burroughs B20	CIE Systems 680/10
WORD LENGTH, BITS	8	8	8	16	32/16
CPU Model	Zilog Z80-A	Zilog Z80-A	Zilog Z80-A	Intel 8086, 8088	Mot. M68000
Add time, microseconds No. of I/O ports on basic sys. and max.	 8, 256	8, 256	8, 256	=	3, 6
INTERNAL STORAGE Type Capacity of basic system, bytes Maximum capacity, bytes Increment size, bytes Cycle/access time, microseconds	MOS 64K 320K 64K	MOS 128K 320K 64K	MOS 128K 320K 64K	MOS 128K 512K (B21), 640K*	MOS RAM 128K 256K 128K 200 nano.
MASS STORAGE Floppy disk (diskette) drive Maximum diskette storage Cartridge disk drive Pack disk drive Fixed-head disk/drum Maximum disk storage	Std.; 800K bytes 6.4MB Optional Optional Optional 10.8M bytes	Std.; 800K bytes 6.4M bytes Optional Optional Optional 10.8M bytes	Std.: 800K bytes 6M bytes Optional Optional Std.: 10M bytes 10.4M bytes	Std.; 500K bytes 1M bytes — 6.2M-60M bytes 11MB (B21), 60MB*	320K bytes 1.2M bytes No No 10MB Winch. 40M bytes
WORKSTATIONS  Maximum number connectable Recommended maximum number Keyboard style Workstation printer	256 8 Type, num. key. Standard	256 8 Type., num. key, Standard	256 8 Type., num. key, Standard	16 1-16 98-key, detachable Optional	1 1 Type., num. key. Optional
INPUT/OUTPUT DEVICES Serial printer Line printer Reel-to-reel tape drive Cassette/cartridge tape drive CRT Other	Std.; 80 cps Optional Optional Optional Std.; 1920 char.	Std.; 80 cps Optional Optional Optional Optional Std.; 1920 char.	Std.; 80 cps Optional Optional Optional Std.; 1920 char.	Opt.; 35 cps Opt.; 300 lpm No No Std.; see COMMENTS	Optional; 40-120 cps No No
COMMUNICATIONS Maximum no. of lines Synchronous Asynchronous Protocols supported Network architecture supported RJE terminals emulated IBM 3270 emulation	64 Std.; to 9600 bps Standard Bisync, No No Yes	64 Std.; to 9600 bps Standard Bisync No No Yes	64 Std.; to 9600 bps Standard Bisync No No Yes	— Standard 2780/3780 X.25 2780/3780 Yes	4 Std.; 50-19.2K bps No No No
SOFTWARE SUPPORT Cobol RPG Fortran Basic Assembler Other programming languages Multiprogramming Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported Software separately priced	Yes No Yes Yes Yes Algol-60, Pascal No 1 No No Yes Med., Legal, scient. Yes Yes Yes	Yes No Yes Yes Yes Algol-60, Pascal No 1 No No No Syes Bus., CPA, WP Yes No No No	Yes No Yes Yes Yes Algol-60, Pascal No 1 No No Syes Retail, inventory Yes No No	Yes No Yes Yes No Pascal Yes — — Yes WP No ISAM Yes —	No Yes No Yes No - Yes - No No Yes - No So
LEASE/MAINTENANCE OPTIONS Lease plans available Maintenance plans available	Yes Yes	Yes Yes	Yes Yes	Yes Yes	 Yes
PRICING & AVAILABILITY Purchase price of basic system, \$ Monthly rental of basic system, \$ Monthly maint, price of basic system, \$	6,995  100	7,995 	10,995  100	4,095 (B21-1)** Contact vendor	\$5,500 — —
Monthly maint. bundled with rental, \$ Purchase price of: additional memory module, \$ additional workstations, \$ additional printer, \$ Discounts available	550 (64KB)   Yes	550 (64KB) 	550 (64KB) — — Yes	Contact vendor Contact vendor Contact vendor	Contact vendor Contact vendor Contact vendor
Date of first U.S. delivery Number installed to date	June 1981 100	June 1981 25	June 1981 25	May 1982 NOT AVAILABLE	April 1982 NOT AVAILABLE
COMMENTS				*B22; the B21 display features 80 characters x 28 lines; the B22 features 132 char. x 34 lines; \$7,495 for B22 Level II with 256KB RAM	Includes 32-segmer Memory Manage- ment Unit; entry- level business sys- tem

MANUFACTURER AND MODEL	CIE Systems 680/20	CIE Systems 680/40	Computhink Hawk 32	Hewlett-Packard HP 250	IBM Series/1 4954
WORD LENGTH, BITS	32/16	32/16	16	16	8-bit byte/ 16-bit word
CPU Model Add time, microseconds No. of I/O ports on basic sys. and max.	Mot. M68000 	Mot. M68000	Mot. M68000  16	Mod. 20,30,35,40,50 1000 (12 digits) 5, 10	IBM Model 4954 
INTERNAL STORAGE Type Capacity of basic system, bytes Maximum capacity, bytes Increment size, bytes Cycle/access time, microseconds	MOS RAM 256K 512K 256K 200 nano.	MOS RAM 256K 768K 256K 200 nano.	256K 1M 256K 0.667	MOS 256K 576K 64K, 128K, 256K 0.833	MOS RAM 64K 256K 64K 1.4
MASS STORAGE Floppy disk (diskette) drive Maximum diskette storage Cartridge disk drive Pack disk drive Fixed-head disk/drum Maximum disk storage	320K bytes 1.2M bytes No No 10MB Winch. 40M bytes	320K bytes 640K bytes — — 20MB Winch. 160M bytes	Opt.; 800K bytes 1.5M bytes Opt.; 20/40MB No No 198M bytes	1.2M bytes 3.6M bytes Opt; 20M bytes No No 256M bytes	Opt.; 1.2M bytes 2.4M bytes See Comments No Optional
WORKSTATIONS Maximum number connectable Recommended maximum number Keyboard style Workstation printer	4 1-4 Type., num. key. Optional	16 1-16 Type., num. key. Optional	16 16 Type., num. key. Optional	10 5-8 Type., num. key. Optional (2)	— — Type., num. key. No
INPUT/OUTPUT DEVICES Serial printer Line printer Reel-to-reel tape drive Cassette/cartridge tape drive CRT Other	Opt.; 40-120 cps	Opt.; 300-600 lpm No Std.; 20 ips, 20 MB Std.; 1920 char.	Opt.; 200 cps Opt.; 180-650 lpm No No Opt.; 1920 char.	Opt.; 40-180 cps Opt.; 400 lpm No Opt.; 28, 67MB Opt.; 1920 char. No	Opt.; 40-160 cps Opt.; 80-414 lpm Opt; to 12,000 bps No Optional
COMMUNICATIONS Maximum no. of lines Synchronous Asynchronous Protocols supported Network architecture supported RJE terminals emulated IBM 3270 emulation	4 Std.; 50-19.2K bps No No No	32 	16 Standard Standard Bisync, Sync, RS-232 — No	5 Opt.; (1) 19.2K bps Opt.; (10) 9600 bps 2780/3780 — 2780/3780 No	8 Opt.; to 56,000 bps Opt.; to 9600 bps Bisync, Async System/370 3780, HASP Yes
SOFTWARE SUPPORT Cobol RPG Fortran Basic Assembler Other programming languages Multiprogramming Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported Software separately priced Technical help separately priced	Yes No Yes Yes Yes No C, Pascal Yes — No No No SAM Yes — No ISAM Yes Yes	Yes No Yes Yes No C, Pascal Yes No No No No Yes No ISAM Yes Yes	Yes No Yes Yes Yes Yes Yes Yes Yes No No No No Science & business Yes Random, seq. Yes Partly	No No Yes No Yes 6 No No No Yes Manuf., distrib. Yes Dir.chainseq.,CAL Yes (applic. only) Yes	Yes No Fortran IV No Macro assembler PL/1 Yes — No No Ses General purpose No Index Yes Yes Yes Yes
LEASE/MAINTENANCE OPTIONS Lease plans available Maintenance plans available	 Yes	 Yes	No Yes	1 to 5 years On-site, on-call	Purchase only On-site contract
PRICING & AVAILABILITY Purchase price of basic system, \$ Monthly rental of basic system, \$ Monthly maint. price of basic system, \$ Monthly maint. bundled with rental, \$ Purchase price of: additional memory module, \$ additional workstations, \$ additional printer, \$ Discounts available	6,000  Contact vendor Cotact vendor	12,000	7,250  NOT AVAILABLE  8,000 (128KB) 1,200 Varies Up to 42 percent	18,250 — 173 — 1,000 (64KB)* 2,500 11,500 (400 lpm) OEM and volume	8,810 — 41 — 1,095 (64KB) — Contact vendor
Date of first U.S. delivery Number installed to date	April 1982 NOT AVAILABLE	April 1982 NOT AVAILABLE	April 1982 4	September 1978 NOT AVAILABLE	March 1982 NOT AVAILABLE
COMMENTS	Includes 32-seg- ment Memory Mange- ment Unit; UNIX III System operat- ing system	See 680/20 COM- MENTS		Software assigns por tion of RAM as registers; operating system is resident in RAM: *\$1,500 for 128KB and \$2,500 for 256KB	

MANUFACTURER AND MODEL	MAI / Basic Four System 310	MAI / Basic Four System 710	MAI/Basic Four System 810	Multi-Tech Systems MT500 Series	Northern Telecom 503
WORD LENGTH, BITS	8-bit byte	8-bit byte	16	8	8
CPU		DE 1 00	DE1 0D	70.0	NITI FOO
Model Add time, microseconds	BFLSD	BFLSD 3	BFLSD 3	Zilog Z80A	NTI-503 11.17
	15	31	64	1, 3	4
INTERNAL STORAGE					İ
Type	MOS	MOS	Bit slice	MOS RAM	MOS
Capacity of basic system, bytes Maximum capacity, bytes	96K 256K	96K 512K	1.5M 1.5M	64K 64K	64K 256K
Increment size, bytes	32K	32K	NOT AVAILABLE		64K
Cycle/access time, microseconds	0.6	0.6	0.6		O.85K
MASS STORAGE					
Floppy disk (diskette) drive	_	_	_	Std., 300K bytes	Std.; (2) 1.6M bytes 3.2M bytes
Maximum diskette storage Cartridge disk drive	_		_	1.8M bytes	No Dytes
Pack disk drive	_	Std.; 35-75M bytes	Opt.; 75-144MB		No
Fixed-head disk/drum	Std.; 40M bytes 120M bytes	 600M bytes	Opt.; 62-144MB 600M bytes	Opt.; 5.9 bytes 7.7M bytes	No
Maximum disk storage	1 ZOWI Dytes	OCCIVI Dytes	Occivi bytes	7.7W bytes	I
WORKSTATIONS	14	15	32		1
Maximum number connectable Recommended maximum number	14	15	32	_	i
Keyboard style	Type., num. key.	Type., num. key.	Type., num. key.	Type., num. key.	Type., num. key.
Workstation printer	Std.; 80 cps	Std.; 120 cps	Std.; 120 cps	Optional	No
INPUT/OUTPUT DEVICES			0.1.405		
Serial printer	Std.; 80 cps (16) Optional (2)	Std.; 120 cps (32) Optional (2)	Std.; 120 cps (64) Optional (2)	Optional No	Opt.; to 180 cps
Line printer Reel-to-reel tape drive	Opt.; 1600 bpi	Opt.; 1600 bpi	Opt.; 1600 bpi	No	No
Cassette/cartridge tape drive	Std.; 9.2M bytes	Opt.; 9.2M bytes	NOT AVAILABLE	No	No
CRT Other	Standard (1)	Standard —	Standard	Std.; 1920 char.	Std.; 1920 char.
COMMUNICATIONS  Maximum no. of lines	16	32	32	1	2
Synchronous	Opt.; 9600 bps	Opt.; 9600 bps	Std.; 9600 bps	Opt.; 300-2400 bps	Opt.; to 9600 bps
Asynchronous	Std.; 9600 bps	Std.; 9600 bps	Std.; 9600 bps	<u> </u>	Std.; to 9600 bps Async, Bisync, SDL0
Protocols supported Network architecture supported	2780/3780 NOT AVAILABLE	2780/3780 NOT AVAILABLE	2780/3780 NOT AVAILABLE	_	OMNILINK
RJE terminals emulated	2780/3780	2780/3780	2780/3780		2770, 2780, 3780*
IBM 3270 emulation	Yes	Yes	Yes	_	Yes
SOFTWARE SUPPORT				V	V
Cobol RPG	No No	No No	No No	Yes No	Yes No
Fortran	No	No	No	Yes	No
Basic	Yes	Yes	Yes	Yes	Yes No
Assembler Other programming languages	No	No —	No Pascal	No —	TAL 2000
Multiprogramming	Yes	Yes	Yes	_	Yes
Max. no. of jobs run concurrently Language complemented in firmware	20 Yes	36 Yes	80 Yes	No	No
Op. sys. implemented in firmware	No	No :	No	No	No
General accounting packages	Yes	Yes	Yes COMMENTS	Yes WP	Yes Business, various
Industry application areas Data base management system	See COMMENTS No	See COMMENTS No	See COMMENTS No	No	No
File access methods supported		Seq., indexed, ser., dir	Seq., indexed, direct	Direct	Seq., rand., indexed
Software separately priced Technical help separately priced	Yes Yes	Yes Yes	Yes Yes	_	Yes No
. ,	res	165	163		1.40
LEASE/MAINTENANCE OPTIONS  Lease plans available	Contact vendor	Contact vendor	Contact vendor		1-3 years
Maintenance plans available	Contact vendor	Contact vendor	Contact vendor		On-call
PRICING & AVAILABILITY					1
Purchase price of basic system, \$	54,625	69,100	Contact vendor	Contact vendor	6,490
Monthly rental of basic system, \$	Contact vendor	Contact vendor	Contact vendor		235 72
Monthly maint, price of basic system, \$ Monthly maint, bundled with rental, \$	504  Contact vendor	594 Contact vendor	Contact vendor Contact vendor	-	72
Purchase price of:					NOT AVAUABLE
additional memory module, \$ additional workstations, \$	2,000 (32KB) 2,650	2,000 (32KB) 2,650	NOT AVAILABLE 2,650	Contact vendor	NOT AVAILABLE
additional printer, \$	8,300 (150 lpm)	8,300 (150 lpm)	8,300 (150 lpm)	Contact vendor	NOT AVAILABLE
Discounts available	NOT AVAILABLE	NOT AVAIALBLE	NOT AVAILABLE	_	Quantity
Date of first U.S. delivery Number installed to date	1982 14,500 (all models)	1982 14,500 (all models)	1982 14,500 (all models)	1982 NOT AVAILABLE	October 1981 NOT AVAILABLE
					*3774
COMMENTS	For property manage- ment, law office	See System 310 COMMENTS	See System 310 COMMENTS	1	37.77
	management, job				
	cost analysis, and membership manage-			1	1
	membership manage- ment		· ·	1	
	}				
	İ			L	L

WORD LENGTH, BITS	R2E America XP/1
Model	
Add time, microseconds   1,17	
No. of I/O ports on basic sys. and max   27	JA
MOS   MOS   MOS   MOS   MOS   MOS   MOS   MOS   MOS   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos   Mos	
Capacity of basic system, bytes   256K   128K   148K   128K   148K   128K   148K   128K   148K   148K   128K   148K   1	
Maximum capacity, bytes   512K   1M   1M   512K   64K	
MASS STORAGE   Floppy disk (diskette) drive   Maximum diskette storage   Std.; 1500K bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 15M bytes   Std.; 28M bytes   Std.; 70M bytes   Std.; 7	
Floppy disk (diskette) drive Maximum diskette storage	
Maximum diskette storage   SOOK bytes   Cartridge disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   Pack disk drive   P	
Cartridge disk drive   Pack disk drive   Pixed-head disk/drum   Pixed-head disk/drum   No   Std.; 18M bytes   Std.; 12M	
Pack disk drive Fixed-head disk/drum Maximum disk storage  WORKSTATIONS Maximum number connectable Recommended maximum number keyboard style Workstation printer  Input/Output/Devices Serial printer Line printer Cassette/cartridge tape drive Cassette/cartridge tape drive Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communication Communicati	tes
Maximum disk storage   342.5M bytes   112M bytes   112M bytes   9.65M bytes	
Maximum no. of lines Synchronous Asynchronous	
16	
Recommended maximum number Keyboard style Workstation printer No No Optional Style, keypunch No No Optional Style, keypunch No No Optional Standard Standard Standard Standard Standard Optic, 300 Ipm Optional Optic, 300 Ipm Optional Optic, 300 Ipm Optional Optic, 300 Ipm Optional Optic, 300 Ipm Optional Optic, 300 Ipm Optional Optic, 300 Ipm Optional Standard Std.; (1) 3168 char. A0-cps printer Optional Std.; (1) 3168 char. A0-cps printer Optional Std.; 1920 char. Std.; (1) 3168 char. A0-cps printer Optional Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std.; 1920 char. Std	
Type, keypunch	
INPUT / OUTPUT DEVICES   Serial printer   Opt.; 180 cps   Opt.; 150 cps   Opt.; 300 lpm   Op	
Serial printer	
Serial printer	
Reel-to-reel tape drive	
Cassette/cartridge tape drive CRT Other CRT Other COMMUNICATIONS Maximum no. of lines Synchronous Asynchronous Protocols supported RJE terminals emulated IBM 3270 emulation  SOFTWARE SUPPORT Cobol RPG RPG RPG RPG RPG Shd.; 1920 char. Yes No No No No No No No No No No No No No	U Ipm
COMMUNICATIONS	
COMMUNICATIONS   Maximum no. of lines   3	20 char.
Maximum no. of lines   Synchronous   Opt.; to 9600 bps   9600 bps   9600 bps   9600 bps   9600 bps   9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   9600 bps   9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 9600 bps   Opt.; to 960	
Synchronous Asynchronous Opt.; to 9600 bps Asynchronous Opt.; to 9600 bps Opt.; to 9	
Asynchronous	
Protocols supported Network architecture supported RJE terminals emulated IBM 3270 emulation  SOFTWARE SUPPORT Cobol Yes No No No No No No No Portran Basic No Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	
RJE terminals emulated   18M 3270 emulation   2770, 2780, 3780*   No	
SOFTWARE SUPPORT	
Cobol RPG         Yes         Y	
Cobol RPG         Yes         Y	
Fortran Basic No Yes Yes Yes Yes Yes Yes Assembler No Yes No Yes Yes Yes Yes Yes Yes Yes Yes Other programming languages TAL 2000 Dibol, MUMPS Dibol, MUMPS Dibol, MUMPS — — — — — — — — — — — — — — — — — — —	
Basic Assembler Other programming languages Multiprogramming Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firmware Op.	
Assembler Other programming languages Other programming Multiprogramming Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firmware Op. No No No No No No No Openeral accounting packages Industry application areas Data base management system Data base management system File access methods supported  No Seg., ISAM, rand., ind ISAM  Yes  Yes  Yes  Yes  Yes  No No No No No No No No Seq., ran ISAM  ISAM  ISAM  Seg. JSAM  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye	
Other programming languages Multiprogramming Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported  TAL 2000 Dibol, MUMPS Yes Yes Yes Yes No No No No No No No No No No No No No	
Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firmware Op. sys. implemented in firmware Op. sys. implemented in firmware No No No No No No No No Yes  Manuf., various No No No No No No ISAM  ISAM  ISAM  ISAM  ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  — ISAM  —	
Language complemented in firmware Op. sys. implemented in firmware Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported  No No No No No No No No No No No No No	
Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported  No No No No No No No No No No ISAM  No No No No ISAM  No No No No No No No No No No No No No	
Industry application areas Manuf., various — No No No Seg., ISAM, rand., ind ISAM ISAM ISAM Seq., rar	
Data base management system No No No No ISAM ISAM ISAM ISAM Seq., rar	
File access methods supported Seg., ISAM, rand., ind ISAM ISAM ISAM ISAM Seq., ran	
Northward congressive property IVan IVan IVan	id., ISAM
Software separately priced Yes No No No Yes Yes Technical help separately priced No No Yes Yes	
LEASE/MAINTENANCE OPTIONS Lease plans available 1-, 2-, 3-year No No No	
Maintenance plans available	vendor
PRICING & AVAILABILITY	
Purchase price of basic system, \$ 27,350   22,631   27,744   See Comments   5,950	
Monthly rental of basic system, \$   782 (36-mo. lease)   NOT AVAILABLE   NOT AVAILABLE   —   —	
Monthly maint, price of basic system, \$ 255	
Purchase price of:	
additional memory module, \$ 3,200 (128KB) 930 (64KB) 930 (64KB) Contact vendor —	
additional workstations, \$ 1,700   1,866   1,866   Contact vendor   — additional printer, \$ NOT AVAILABLE   2,042   Contact vendor   —	
Discounts available Quantity OEM OEM — Quantity	
Date of first U.S. delivery July 1981 October 1981 October 1981 1982 1979	
Number installed to date 100 250 NOT AVAILABLE 52	
COMMENTS *3774 Floppy disk-based	
system (1.25MB)	
with printer is \$6,998, hard	
disk-based system	
(8.4MB) with	
printer is \$11,453	

VALUE   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value   CPU   Value	MANUFACTURER AND MODEL	R2E of America XP/2	R2E of America XP/3	R2E of America XP/4	R2E of America XM/2	SD Systems SD 200
Mode   Add times, microseconds   Sys. and max	WORD LENGTH, BITS	8	8	8	8	8
Add time, microseconds No. of I/D ports on basic sys. and max.  INTERNAL STORAGE Type Cadesimpt bytes Cadesing the basic system, bytes Cadesing the basic system, bytes Cadesing the basic system, bytes Cadesing the basic system, bytes Cadesing the basic system, bytes Cadesing the basic system, bytes Cycle / access time, microseconds Cadesing the basic system, bytes Cycle / access time, microseconds Cycle / acces						
No. of U/O ports on basic sys. and max.   3   3   3   3   3   3   3   3   3		Zilog Z80A	Zilog Z80A	Zilog Z80A	Zilog Z80A	1_
Type		3	3	3	3, 11	2, 6
Cipaciny of basic system, bytes   64K	INTERNAL STORAGE					
Maximum capacity, bytes						
Increment size, tyries						
MASS STORAGE Flappy disk (diskerted) drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy drive Flappy		_	-	-	_	
Floppy of six (disk etter) drive   Maximum disk ste storage   Carridge disk drive   Opt. 20M bytes   Opt. 20M bytes   Std. 500K bytes   Std. 500K bytes   Std. 500K bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Opt. 20M bytes   Op	Cycle/access time, microseconds		-	-	-	-
Maximum diskette storage						
Carridge disk drive				Opt.; 1.8M bytes		
Pack disk driver				Std · 20M bytes		ZIVI bytes
Maximum disk storage   21.8M bytes   5.9M bytes   21.8M bytes	Pack disk drive	—	—	- Sta., ZOIVI Dytes	—	_
WORKSTATIONS			_			-
Maximum number connectable	iviaximum disk storage	∠1.8M bytes	5.9IVI bytes	21.8M bytes	21.8IVI bytes	-
ASCII						-
ASCII		_		_	3	
Workstation printer		ASCII	ASCII	ASCII	ASCII	
17-150 cps			_	-	_	-
17-150 cps	NPUT/OUTPUT DEVICES					
Line printer   Reel-to-reel tape drive   Cassette/cartridge tape drive   Cassette/cartridge tape drive   CRT   Std.; 1920 char.   Std.; 1920 cha	Serial printer					Opt.; 120-150 cps
Cassette/cartridge tape drive   CRT		Opt.; 300 lpm	Opt.; 300 lpm	Opt., 300 lpm	Opt., 300 lpm	-
Std., 1920 char.						
COMMUNICATIONS		Std.; 1920 char.	Std.; 1920 char.	Std., 1920 char.	Std.; 1920 char.	-
Maximum no. of lines   Synchronous   Synch		_		-	-	-
Maximum no. of lines   2	COMMUNICATIONS					1
Asynchronous	Maximum no. of lines					-
Protocols supported						-
Network architecture supported		oh to 3000 phs	—	Op 10 9000 bps	—	_
SOFTWARE SUPPORT	Network architecture supported			-	-	MARS/NET
Ves		_	_		_	
Cobol   Yes   Ye						
RPG		Voc	Voc	Vos	Vac	Voc
Fortran						Tes
Assembler Other programming languages Other programming languages Multiprogramming Max. no. of jobs run concurrently Language complemented in firmware Op. sys. implemented in firms No. Op. No.		Yes		Yes	Yes	_
Chter programming languages						Yes
Multiprogramming		Yes	Yes	Yes	Yes	
Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported Software separately priced Software separately priced Technical help separately priced Ves Yes Yes Yes Yes Yes Yes Yes Yes Yes Y			_	_	Yes	
Op. sys. implemented in firmware General accounting packages Industry application areas Data base management system File access methods supported Software separately priced Software separately priced Technical help separately priced Ves Ves Ves Ves Ves Ves Ves Ves Ves Ves			<del>-</del>			_
General accounting packages Industry application areas Data base management system File access methods supported Software separately priced Technical help separately priced Ves Ves Ves Ves Ves Ves Ves Ves Ves Ves						
Industry application areas Data base management system File access methods supported Software separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separately priced Technical help separ		1	1	1	1	1
File access methods supported Software separately priced Technical help separately priced Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Industry application areas	mirrowen	I—	<u> </u>		l—
Software separately priced Technical help separately priced Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Data base management system  File access methods supported					
Technical help separately priced  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Y						
Lease plans available Maintenance plans available PRICING & AVAILABILITY Purchase price of basic system, \$ Monthly rental of basic system, \$ Monthly maint. price of basic system, \$ ————————————————————————————————————						
Lease plans available Maintenance plans available PRICING & AVAILABILITY Purchase price of basic system, \$ Monthly rental of basic system, \$ Monthly maint. price of basic system, \$ ————————————————————————————————————	LEASE/MAINTENANCE OPTIONS					
PRICING & AVAILABILITY Purchase price of basic system, \$ Monthly rental of basic system, \$ Monthly maint. price of basic system, \$ Monthly maint. price of basic system, \$ ————————————————————————————————————	Lease plans available					_
Purchase price of basic system, \$       6,750       9,950       15,250       Contact vendor       7,495         Monthly rental of basic system, \$       —       —       —       —         Monthly maint, bundled with rental, \$       —       —       —       —         Purchase price of:       —       —       —       —         additional memory module, \$       —       —       —       —       1,385         additional workstations, \$       —       —       —       —       —       1,249         additional printer, \$       —       —       —       —       —       2,250         Discounts available       Quantity       Quantity       Quantity       Quantity       1980         Number installed to date       133       43       NOT AVAILABLE       NOT AVAILABLE       600	Maintenance plans available	Contact vendor	Contact vendor	Contact vendor	Contact vendor	-
Monthly rental of basic system, \$						
Monthly maint. price of basic system, \$ Monthly maint. bundled with rental, \$ Purchase price of: additional memory module, \$ additional workstations, \$ additional printer, \$ Discounts available  Date of first U.S. delivery Number installed to date  Discounts available  Discounts av		6,750	9,950	15,250	Contact vendor	7,495
Monthly maint. bundled with rental, \$ Purchase price of: additional memory module, \$ additional workstations, \$ additional printer, \$ Discounts available  Date of first U.S. delivery Number installed to date		_			_	I=
Additional memory module, \$	Monthly maint, bundled with rental, \$		<del>-</del>	_	-	-
additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional workstations, \$ additional printer, \$ additional prin						1 205
additional printer, \$ Discounts available  Date of first U.S. delivery Number installed to date  Date of first U.S. delivery 1979  1980  1980  1980  NOT AVAILABLE  Date of first U.S. delivery Not Available  Ouantity  1980  NOT AVAILABLE  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980  1980					_	
Date of first U.S. delivery Number installed to date 1979 133 1980 NOT AVAILABLE 1980 NOT AVAILABLE 600	additional printer, \$	l <del>-</del> .	<u> -</u>	_	<u></u>	2,250
Number installed to date 133 43 NOT AVAILABLE NOT AVAILABLE 600	Discounts available	Quantity	Quantity	Quantity	Quantity	Yes
COMMENTS	Number installed to date	133	43	NOT AVAILABLE	NOT AVAILABLE	600
	COMMENTS					1
						1
					1	
			1			[

MANUFACTURER AND MODEL	SD Systems SD 700	Systems Group 2800 Series	Tarbell EMPIRE-II	Zendex Model 235	Zendex Model 238
WORD LENGTH, BITS	8	8	8	8	8
CPU Model	Zilog Z80A	Zilog Z80A	Zilog Z80	Intel 8085AH-2	Intel 8088
Add time, microseconds			1 (two 8-bit bytes)	_	_
No. of I/O ports on basic sys. and max.	2, 6	2, 16	2, 6	3, 3	3, 3
INTERNAL STORAGE					
Type	MOS 64K	MOS 64K	MOS 64K	MOS, Dyn. RAM	MOS, Dyn. RAM 64K
Capacity of basic system, bytes  Maximum capacity, bytes	256K	128K	1M	64K	64K
Increment size, bytes	64K	64K	64K	0.2	0.2
Cycle/access time, microseconds	_	was a	0.25	0.2	0.2
MASS STORAGE	Chandrad (2)	Cad . 620K histor	2 414 5 400	Standard	Standard
Floppy disk (diskette) drive Maximum diskette storage	Standard (2) 2M bytes	Std.; 630K bytes 2.52M bytes	2.4M bytes 2.4M bytes	1M bytes	1M bytes
Cartridge disk drive	_ `	-	_	No	No
Pack disk drive Fixed-head disk/drum	16M bytes 16M bytes	Opt.	<u> </u>	No No	No No
Maximum disk storage	96M bytes	80M bytes	600MB (Winch.)	_	
VORKSTATIONS					
Maximum number connectable	5	8	10	1	1
Recommended maximum number	3-4 Type num key	1-8	Type., num. key.	1 Optional	1 Optional
Keyboard style Workstation printer	Type., num. key. —	_	Standard	Optional	Optional
•				1	•
NPUT/OUTPUT DEVICES Serial printer	Opt.; 120-150 cps	Optional	Optional	Optional	Optional
Line printer			Optional	Optional	Optional
Reel-to-reel tape drive Cassette/cartridge tape drive	<u> </u>	Optional	Optional Optional	No No	No No
Cassette/ cartridge tape drive CRT	_	Optional	Std.; 1920 char.	Optional	Optional
Other	_	_		<u> </u>	
COMMUNICATIONS					
Maximum no. of lines	_		8	3 Sed. 10 3K bas	3 Std : 10 3K bas
Synchronous Asynchronous	_	To 614,400 bps To 38,400 bps	Up to 19.2K bps Up to 19.2K bps	Std.; 19.2K bps Std.; 38.4K bps	Std.; 19.2K bps Std.; 38.4K bps
Protocols supported		_	<u>-</u>	2780/3780, SDLC	2780/3780, SDL
Network architecture supported RJE terminals emulated	MARS/NET	_	CP/NET	Optional No	Optional No
IBM 3270 emulation	_		No	No	No
SOFTWARE SUPPORT					
Cobol	Yes	Yes	Yes	Yes	Yes
RPG Fortran			No Yes	No Yes	No Yes
Basic	Yes	Yes	Yes	Yes	Yes
Assembler		-	Yes	Yes PL/1	Yes
Other programming languages Multiprogramming		Yes	Pascal, PL/1, APL Yes	No	PL/1-86 No
Max. no. of jobs run concurrently	_	_	16	1	1
Language complemented in firmware Op. sys. implemented in firmware	No	No No	No No	No No	No No
General accounting packages	Yes	Yes	Yes	Optional	Optional
Industry application areas	_	_	Small business	<u> </u>	1-
Data base management system File access methods supported	_	ISAM, dir., seq.	Yes Seq., rand., ISAM	No —	No —
Software separately priced	Yes	Yes	Yes	Yes	Yes
Technical help separately priced	Yes	-	Yes	No, standard	No, standard
EASE/MAINTENANCE OPTIONS					N-
Lease plans available Maintenance plans available		_	Contact dealer Contact dealer	No No	No No
·			,		
RICING & AVAILABILITY Purchase price of basic system, \$	20,965	Contact vendor	6,000	6,995	6,995
Monthly rental of basic system, \$	_	_	Contact dealer	-	-
Monthly maint, price of basic system, \$ Monthly maint, bundled with rental, \$		Contact vendor	Contact dealer Contact dealer	_	
Purchase price of:					
additional memory module, \$ additional workstations, \$	1,385 1,249		500 (64KB) 1,000		
additional printer, \$	2,250	_	Contact dealer	_	
Discounts available	Yes	-	15-35 percent	ОЕМ	OEM
Date of first U.S. delivery Number installed to date	1980 25	1982 NOT AVAILABLE	March 1981 175	January 1982 50	January 1982 30
COMMENTS		CP/M, MP/M or OASIS operating		Complete system in dual floppy	Complete system in dual floppy
		systems		disk drive	disk drive
				chassis	chassis
	}				
					1
			1		
	<u> </u>				

MANUFACTURER AND MODEL	Zilog MCZ 1/50	Zilog MCZ-2/Z-Net	Zilog S8000 Model 20	Zilog S8000 Model 30
ORD LENGTH, BITS	8	8	16	16
PU				
Model Add time, microseconds	_	_	Zilog Z8001A	Zilog Z80A
	2, 6	2, 6/node	8, 24	8, 24
INTERNAL STORAGE				
Туре	MOS	MOS	MOS, Semi. ECC	MOS, Semi. ECC
Capacity of basic system, bytes	64K	64K/node	256K	512K
Maximum capacity, bytes Increment size, bytes	64K 	64K/node	1.024M   256K	1.024M 256K
Cycle/access time, microseconds	0.4	0.25	0.18	0.18
MASS STORAGE			į	
Floppy disk (diskette) drive	Std.; 500K bytes	Opt.; 4.8M bytes/node	_	<b> -</b>
Maximum diskette storage Cartridge disk drive	1M bytes No	4.8M bytes/node Opt.; 10M bytes/node	<u> </u>	<u>                                     </u>
Pack disk drive	_	— Opt., Town bytes/ House	_	1=
Fixed-head disk/drum	_	4014 hans (node	Std.; 24M bytes	Std.; 48M bytes
Maximum disk storage	_	40M bytes/node	96M bytes	96M bytes
VORKSTATIONS		000 1	124	24
Maximum number connectable Recommended maximum number	5  1	255 nodes (5 per node) 1/node	24 24	24 24
Keyboard style	Typewriter	Typewriter	Typewriter	Typewriter
Workstation printer	No	No	<b> </b> -	-
NPUT/OUTPUT DEVICES				
Serial printer	Opt.; 150 cps	Opt.; 150 cps	Standard	Standard
Line printer Reel-to-reel tape drive			Opt.; (2) 600 lpm	Opt.; (2) 600 lpm
Cassette/cartridge tape drive	<del></del>	-	Cart.; 14M bytes	Cart.; 14M bytes
CRT	Std.; 1920 char.	Opt.; 1920 char.	Opt.; 1920 char.	Opt.; 1920 char.
Other	<del>-</del>	[-	-	_
OMMUNICATIONS		444.		
Maximum no. of lines Synchronous	4 Optional	4/node Optional	Std.; 9600 bps	8 Std., 9600 bps
Asynchronous	Optional	Optional	Std.; 19.2K bps	Std.; 19.2K bps
Protocols supported Network architecture supported	2780	2780 Z-Net	2780/3780 Z-Net, X.25	2780/3780 Z-Net, X.25
RJE terminals emulated	<del></del>	2-Net	Z-Net, X.25	
IBM 3270 emulation	No	No	No	No
OFTWARE SUPPORT		ł		
Cobol	Yes	Yes	Yes	Yes
RPG Fortran	No Yes	No No	No Yes	No Yes
Basic	Yes	No	Yes	Yes
Assembler	YEs	Yes	Yes	Yes
Other programming languages Multiprogramming	PLZ No	No —	Pascal, PLZ/ASM Yes	Pascal, PLZ/ASM Yes
Max. no. of jobs run concurrently	1	_	24	24
Language complemented in firmware	No	No	Yes	Yes
Op. sys. implemented in firmware General accounting packages	No Yes	No Yes	Yes	Yes
Industry application areas	No	No		
Data base management system File access methods supported	No Yes	No Yes	Yes	Yes
Software separately priced	Variable	Variable	Yes, except OS	Yes, except OS
Technical help separately priced	<del> </del>	-	Yes	Yes
EASE/MAINTENANCE OPTIONS				
Lease plans available	No	No	  Yes	— Yes
Maintenance plans available	Yes	Yes	168	Tes
RICING & AVAILABILITY	e mo	7,000-15,000/node	29,950	37,950
Purchase price of basic system, \$ Monthly rental of basic system, \$	8,000 —	<u> </u>		
Monthly maint, price of basic system, \$	Various	Various	-	
Monthly maint, bundled with rental, \$ Purchase price of:	<del>-</del>	_	-	-
additional memory module, \$			3,750 (256KB)	3,750 (256KB)
additional workstations, \$	2,000	2,000	1,925	1,925
additional printer, \$ Discounts available	2,000 To 40 percent	2,000 To 40 percent	Yes	Yes
	•	1980	October 1991	October 1981
Date of first U.S. delivery Number installed to date	1977 4000	200	October 1981 NOT AVAILABLE	NOT AVAILABLE
OMMENTS		Z-Net is a network system		1
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